

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015759**Date Inspected:** 20-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above.

The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified 5W/6W-A, 5E/6E-C, 4W/5W, 3W/4W-B, and the following observations were made:

5E/6E-C2

The QA Inspector randomly observed the ABF welder Song Tao Hunag had previously started the induction heating blankets on the inside of OBG to ensure the minimum required preheat of 150°F was achieved prior to welding. The QA Inspector randomly verified utilizing a 150°F temperature indicating marker and noted the minimum required preheat had been achieved. The QA Inspector observed the ABF welder to be utilizing the semi automated flux cored arc welding (FCAW) for the above identified weld joint. The QA Inspector randomly observed the Smith Emery (SE) QC Inspector identified as Bonifacio Daquinag set the FCAW machine to the parameters of the approved WPS identified as ABF-WPS-D1.5-3042A The QA Inspector randomly observed the FCAW parameters were 236 Amps, 24.1 Volts and a travel speed of 250mm/min. The QA Inspector randomly observed the ABF welder identified above continue the FCAW cover passes on approximately 4000mm of weld segment C2 in the am. The QA Inspector noted the weld segment C2 was completed on this date. The QA Inspector noted the remainder of the QA Inspectors shift, the ABF welders were moving and setting up to perform welding at weld segment C1.

3W/4W-B

Upon the arrival of the QA Inspector at the above identified location, the QA Inspector randomly observed the ABF welder identified as Hua Qiang Huang performing grinding tasks. The QA Inspector randomly observed the

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

SE QC Inspector identified as Bonifacio Daquinag had previously indicated with a distinguishing marking, areas that required additional grinding prior to visual acceptance. The QA Inspector noted multiple areas appeared to have excessive weld reinforcement and unacceptable weld profiles. The QA Inspector noted the ABF welder spent the remainder of the QA Inspectors shift performing the grinding tasks. The QA Inspector noted no welding was performed on this date.

5W/6W-A1-5

Upon the arrival of the QA Inspector at the above identified location, it was observed and noted the weld reinforcement had been ground flush with the base material of the top deck plates. The QA Inspector randomly observed and noted the SE QC Inspectors Tom Pasqualone and Steve McConnell performing magnetic particle testing of above identified weld joint. The QA Inspector randomly observed the above identified QC Inspectors perform MT of 100% of the total weld length of the above identified weld joint. The QA Inspector noted no relevant indications were located at the time of the testing. The QA Inspector performed 10% MT verification of the total weld length in weld segment identified as A2. The QA Inspector noted no relevant indications were located at the time of the testing (see TL-6028 for additional information).



Summary of Conversations:

The SE QC Inspector Steve McConnell informed the QA Inspector the MT of the 5W/6W-A weld CJP weld joint was acceptable. Mr. McConnell informed the QA Inspector he would likely begin the ultrasonic testing tomorrow 7-21-10.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

Inspected By: Bettencourt, Rick

Quality Assurance Inspector

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Reviewed By: Levell,Bill

QA Reviewer